

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A LNG regasification plant comprising:
a liquefied natural gas storage vessel having a receiving port that is configured to receive liquefied natural gas and further having separate liquid withdrawal and vapor withdrawal ports that are configured to allow separate withdrawal of a liquefied natural gas liquid and a liquefied natural gas vapor from the storage vessel;
a fractionator that is fluidly coupled to the storage vessel and configured to receive a fractionator feed, wherein the fractionator is configured to allow production of (a) an overhead product comprising a stream of C₂ and lighter components and (b) a bottom product comprising C₃ and heavier components;
an overhead condenser coupled to the fractionator and configured to allow refrigeration content of the liquefied natural gas liquid to condense the overhead product comprising C₂ and lighter components; and
wherein the fractionator feed is a combination of the bottom product comprising C₃ and heavier components and the liquefied natural gas vapor originating from the vapor withdrawal port in which the C₃ and heavier components absorb the liquefied natural gas vapor.
2. (original) The plant of claim 1 wherein a portion of the liquefied natural gas vapor from the storage vessel is routed to a second liquefied natural gas storage vessel.
3. (original) The plant of claim 1 further comprising a heat exchanger configured to cool the fractionator feed using the liquefied natural gas liquid as a refrigerant.
4. (currently amended) The plant of claim 1 further comprising a second heat exchanger configured to heat the fractionator feed using the stream of bottom product comprising C₃ and heavier components from the fractionator as a heat source.
5. (currently amended) The plant of claim 1 wherein the fractionator is configured to provide the condensed overhead product comprising C₂ and lighter components to the liquefied natural gas liquid.

6. (original) The plant of claim 1 further comprising a second liquefied natural gas storage vessel that provides the liquefied natural gas and configured to provide a second liquefied natural gas vapor to the second liquefied natural gas storage vessel.
7. (original) The plant of claim 6 wherein the second liquefied natural gas storage vessel is located on a ship.
8. (currently amended) The plant of claim 1 wherein the fractionator is configured to receive a portion of the liquefied natural gas liquid as fractionator feed after the liquefied natural gas liquid provided refrigeration for condensation of the overhead product comprising C₂ and lighter components.
9. (original) The plant of claim 8 wherein the fractionator is further configured to provide a liquefied petroleum gas as a bottom product.
10. (currently amended) The plant of claim 8 wherein the fractionator is configured to receive another portion of the liquefied natural gas liquid as condensation refrigerant after the liquefied natural gas liquid has provided refrigeration for condensation of the overhead product comprising C₂ and lighter components.
11. (currently amended) A method of handling liquefied natural gas vapor in a LNG regasification plant, comprising:
separately and concurrently withdrawing from providing a liquefied natural gas storage vessel that is configured to allow withdrawal of a liquefied natural gas liquid and a liquefied natural gas vapor;
combining the liquefied natural gas vapor from the storage vessel with a fractionator bottom product comprising stream of C₃ and heavier components from a fractionator to thereby absorb the liquefied natural gas vapor from the storage vessel and to thereby form a combined product;
separating in the fractionator the combined product into the stream of fractionator bottom product comprising C₃ and heavier components and a stream of C₂ and lighter components; and

condensing in an overhead condenser the stream of C₂ and lighter components using refrigeration content of the liquefied natural gas liquid.

12. (original) The method of claim 11 further comprising a step of using the liquefied natural gas liquid as a refrigerant to cool the combined product before the combined product is fed to the fractionator.
13. (currently amended) The method of claim 11 further comprising a step of using the stream of fractionator bottom product comprising C₃ and heavier components from the fractionator to heat the combined product before the combined product is fed to the fractionator.
14. (original) The method of claim 11 further comprising a step of providing a second liquefied natural gas storage vessel that provides the liquefied natural gas to the liquefied natural gas storage vessel.
15. (original) The method of claim 14 wherein the second liquefied natural gas storage vessel receives a portion of the liquefied natural gas vapor.
16. (original) The method of claim 14 wherein the second liquefied natural gas storage vessel is configured to form a stream of liquefied natural gas vapor, and wherein the stream of liquefied natural gas vapor is provided back to the second liquefied natural gas storage vessel.
17. (original) The method of claim 14 wherein the second liquefied natural gas storage vessel is located on a ship.
18. (original) The method of claim 11 further comprising a step feeding a portion of the liquefied natural gas liquid to the fractionator after the liquefied natural gas liquid has provided refrigeration for condensation of the C₂ and lighter components.
19. (original) The method of claim 18 wherein the fractionator is configured to provide a liquefied petroleum gas as a bottom product.

20. (original) The method of claim 19 further comprising a step of using another portion of the liquefied natural gas liquid as condensation refrigerant after the liquefied natural gas liquid provided refrigeration for condensation of the C₂ and lighter components.